

What is claimed is:

1. A rare gas discharge lamp lighting apparatus having a power supply, a transformer, a switching element which is in series connected to the power supply and a primary side of the transformer, a rare gas discharge lamp connected on a secondary side of the transformer, and an input terminal for inputting a lamp lighting signal, a controlling circuit for outputting a controlling signal to the switching circuit by calculating at least one of output voltage, output current and output power, and an operating voltage input terminal to which voltage is impressed to initiate an operation of the controlling circuit based on the lamp lighting signal, wherein a delay element is provided between the input terminal and the operating voltage input terminal.

2. The rare gas discharge lamp lighting apparatus according to claim 1, wherein a first controlling element is connected between the power supply and the operating voltage input terminal, and the delay element is provided between the input terminal and the first controlling element.

3. The rare gas discharge lamp lighting apparatus according to claim 1, wherein a first controlling element is connected between the power supply and the operating voltage input terminal, a second controlling element connected

between a first controlling terminal of the first controlling element and ground, the input terminal connected to a second controlling terminal of the second controlling element, and the delay element connected between the second controlling element and the ground.

4. The rare gas discharge lighting apparatus according to claim 1, the delay element is a zener diode.

5. The rare gas discharge lighting apparatus according to claim 2, the delay element is a zener diode.

6. The rare gas discharge lighting apparatus according to claim 3, the delay element is a zener diode.

7. A lamp lighting apparatus having a transformer, a switching element connected to a primary side of the transformer, a lamp connected on a secondary side of the transformer, and an input terminal for inputting a lamp ON signal, a controlling circuit for outputting a controlling signal to the switching circuit, and an operating voltage input terminal to which voltage is impressed to initiate an operation of the controlling circuit based on the lamp lighting signal, wherein a delay element is provided between the input terminal and the operating voltage input terminal.

8. The lamp lighting apparatus according to claim 7, further including a power supply terminal and a first controlling element wherein the first controlling element is connected between the power supply terminal and the operating voltage input terminal, and the delay element is provided between the input terminal and the first controlling element.

9. The lamp lighting apparatus according to claim 7, further including a power supply terminal, a first controlling element and a second controlling element wherein the first controlling element is connected between the power supply terminal and the operating voltage input terminal, the second controlling element connected between a first controlling terminal of the first controlling element and ground, the input terminal connected to a second controlling terminal of the second controlling element, and the delay element connected between the second controlling element and the ground.

10. The lamp lighting apparatus according to claim 7, the delay element is a zener diode.

11. The lamp lighting apparatus according to claim 8, the delay element is a zener diode.

12. The lamp lighting apparatus according to claim 9,

the delay element is a zener diode.

13. The lamp lighting apparatus according to claim 7, wherein direct current power voltage and the lamp ON signal applied to the power supply terminal and the input terminal respectively at the same time.